

**REMARKS**

The Official Action of May 18, 2004, and the prior art relied upon therein have been carefully reviewed. The claims in the application are now claims 1-4 and 6-11, of which claims 3 and 7-11 have been withdrawn as being directed to non-elected subject matter. Applicants' claims define novel and unobvious subject matter under Sections 102 and 103, and therefore should be allowed. Applicants respectfully request withdrawal of the restriction requirement and the rejections, and consequent allowance of all of applicants' claims.

Acknowledgement by the PTO of the receipt of applicants' papers filed under Section 119 is noted.

Restriction was required among what the examiner deems to be three (3) patentably distinct inventions, applicants orally elected Group I with traverse, and the examiner has consequently withdrawn claims 3-11 as being directed to non-elected subject matter. The restriction requirement is respectfully traversed.

Applicants have difficulty in understanding why there should be restriction among the three groups of claims, as they are clearly closely inter-related. The PTO says that

the elected intermediate product can be used to make other final products, but this absolutely is not so. The example given, a multi-layered container having a larger mouth portion than body portion, is not a distinction; claim 3 does not require a larger mouth portion than the body portion. The requirement for restriction thus raises a distinction which does not exist.

As regards Groups I and III, applicants absolutely dispute the conclusion reached in the restriction requirement, which conclusion is unsupported by any evidence whatsoever, and is (respectfully) based entirely on speculation. It should be absolutely clear that the entire import of applicants' disclosure is that the claimed method **must** be used to obtain the claimed product, i.e. other methods will not do so. This is clear from applicants' specification, and was consistently argued by applicants in the parent application.

As the requirement is incorrect for the reasons given above, such restriction requirement should be withdrawn and applicants should receive an examination on the merits of all of the claims.

Applicants moreover believe that there is a second reason why the requirement should be withdrawn, this reason being based on the second paragraph of MPEP 803 which **requires** a search and examination of an entire application, and this is

so even if the requirement is correct, if such search and examination would not constitute a "serious burden". Even though the three groups may be separately classified, there would be no additional burden, and certainly not an additional "serious burden" in searching and examining presently non-elected Groups II and III, **because** the search and examination of applicants' claims were already conducted in the **parent application**. Moreover, even if that were not true (but it is true), the Groups are so tightly connected and interrelated, that a search and examination of the elected subject matter cannot be done completely without also searching and examining the presently non-elected Groups II and III.

Again, applicants request withdrawal of the restriction requirement and examination of all the claims on the merits.

Claims 1, 2 and 4-6 have been rejected as obvious from Nakagawa in view of Yamada, a rejection repeated from the parent application. This rejection is again respectfully traversed.

Nakagawa relates to a direct blow molding method. In direct blow molding, the freshly extruded hot hollow parison corresponds only very roughly to the preform of the present invention. However, because the parison is freshly extruded as a hollow tube without a top or bottom surface,

such parison when initially formed does not have any bottom, i.e. it does not conform with applicants' claims. Moreover, the parison provided in such a direct flow molding method, as in Nakagawa, does not have the same type of flow orientation as is provided in the present invention, because it is freshly extruded and in a molten or semi-molten state. Therefore, the parison of Nakagawa differs significantly from the claimed preform of the present application.

Moreover, when the container is molded according to the direct blow molding method as in Nakagawa, the above-mentioned molten or semi-molten parison is placed within the metal mold and blown out at the same time. Therefore, the pinched off portion to form part of the bottom, which is not substantially drawn and has a thick wall, and the other thin-wall portion which is drawn, are formed in the bottom of the molding container. (This pinched off portion has been omitted in the Fig. 6 illustration of Nakagawa but is inherently present.) The pinched off portion solidifies without drawing of the inner and outer layer, so it does not become oriented. In addition, the surrounding thin wall portion immediately touches the cooled metal mold after the hot resin of the parison has been drawn, so it solidifies without orientation of the inner and outer layer.

Therefore, the parison and the container provided by the direct blow molding method used by Nakagawa is importantly different in polymer orientation from the preform and the container of the present invention, in that the difference of the peak width at half height on the surface of the inner and outer of the bottom, as presently claimed, absolutely cannot be achieved in Nakagawa.

The rejection relies on alleged inherency, but this is absolutely wrong. Thus, the PTO has incorrectly and improperly assumed inherency, whereas there is no basis for such assumption. From *In re Rijckaert*, 28 USPQ2d 1955, 1957 (Fed Cir 1993):

Nor are the means to achieve this optimal condition disclosed by Awamoto, explicitly or implicitly. "The mere fact that a certain thing **may** result from a given set of circumstances is not sufficient [to establish inherency.]" *In re Oelrich* ... 212 USPQ 323, 326 (CCPA 1981) (citations omitted) [emphasis added by Rijckaert Court]. "That which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown." *In re Spormann*, ... 150 USPQ 449, 452 (CCPA 1966).

Inherency must be reasonably certain or inevitable. For example, please see *In re Brink*, 164 USPQ 247, 249:

Absent a showing [by the PTO] of some **reasonable certainty** of inherency, the rejection... must fail. (emphasis added)

Also see *Ex parte Cyba*, 155 USPQ 756, 757 (1967); *In re Oelrich*, 212 USPQ 323, 326 (1981); *Schering Corp. v. Geneva*,

67 USPQ2d 1664 (Fed. Cir. 2003); *Holbrooks v. Bacchi*, 69 USPQ2d 1696, 1699 (BPAI 2003). Also see *In re Dillon*, 13 USPQ2d 1337, 1348:

The Board stated that it is inherent in Dillon's compositions that they would reduce particulate emissions, that Dillon "merely recited a newly discovered function inherently possessed" by the prior art. The courts have not upheld arguments based on "inherent" properties when there is no supporting teaching in the prior art. Inherency and obviousness are distinct concepts. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, ... 1555, 220 USPQ 303, 314 (Fed. Cir 1983), *cert. denied*, 469 U.S. 851 (1984); *In re Spormann*, ... 150 USPQ 449, 452 (CCPA 1966) ("the inherency of an advantage and its obviousness are entirely different questions. That which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown.") When the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, the PTO must produce supporting references. [*In re*] *Yates*, ... 211 USPQ at 1151.

There is no reasonable certainty that the polymer orientation in Nakagawa is the same or even similar to that in the present invention, and indeed all logic (as pointed out above) suggests the contrary; therefore, inherency in the citations is neither inevitable, necessarily present nor reasonably certain, and inherency (which does not exist) cannot be relied upon. The PTO has no basis and no supporting references for assuming inherency in the present

case as inherency is not inevitable, is not reasonably certain, and is not even probable.

Nakagawa is therefore fundamentally deficient, relating to a different type of method for producing a hollow plastic product, such a method of Nakagawa being incapable of providing applicants' claimed preform as called for in claim 1, or applicants' claimed multi-layered bottle as called for in claim 5. Thus, key additional features not shown by Nakagawa as called for in claim 1 include a preform which has "a bottom portion", and a "preform having a molecular orientation and shape produced by compression molding from a composite molten resin lump", in addition to (as already noted above) a preform wherein, at the center of the bottom portion, a half-width of a diffuse scattering peak of the outer layer is larger than a half-width of a diffuse scattering peak of the inner layer.

Moreover, Nakagawa does not show or suggest applicants' intermediate layer, which is a gas barrier layer (e.g. polyamide resin) or recycled resin.

Yamada discloses an intermediate layer of gas barrier resin, but has not been cited to make up for all of the above-noted deficiencies, and indeed does not do so. Therefore, even if the proposed combination were obvious, the

resultant reconstruction of such a combination would not reach applicants' claims.

Contrary to Nakagawa, Yamada concerns a multi-layer plastic laminate structure "formed by draw-flow molding, solid phase air-pressure forming or press molding" (column 1, lines 58, 59), but preferably by "multi-layer co-extrusion" (column 6, lines 59, 60). As the examiner indicates, Yamada discloses a multi-layer composition (container) of which an inner and outer layer is made of polyethylene terephthalate, and the intermediate layer is made of gas-barrier resin.

However, in Yamada a multi-layer preform made by compression molding (per the present invention) or a multi-layer container which is made from such a multi-layer preform is not described. This is clear from the description at column 6, line 59 to column 7, line 14, especially column 7, line 4 to 14, "... a pipe for a bottle or a preform for a bottle. In case of a preform for a bottle, the extruded melt resin layer laminate pipe is subjected to preliminary blow forming into a preform having the mouth and the bottom in a mold, or the extruded melt multi-layer pipe is quenched and then cut into predetermined length, and then both the ends of the resulting pipe having openings on both the ends are heated and formation of the mouth and fusion bonding of the bottom are accomplished by compression forming."



Therefore, Yamada, like Nakagawa as mentioned above, does not show or describe key features of the present invention, with the result that no possible combination of Nakagawa and Yamada can reach the present claims. Thus, even in the case where Yamada teaches the formation of a preform rather than a parison, the preform is shaped from a co-extruded pipe and does not have a shape formed by compression molding from a composite molten resin lump as called for in applicants' claims. As a result, there is a different polymer orientation, and a half-width of a diffuse scattering peak of the outer layer at the center of the bottom portion of any preform prepared according to Yamada cannot be larger than a half-width of a diffuse scattering peak of a surface of the inner layer of such a preform.

The importance of these distinctions goes to the very heart of the present invention as pointed out in applicants' specification and in the Remarks of the Replies in the parent application in which it was pointed out, relative to the previously applied Valyi citation, that producing a preform by coextrusion provides certain problems both in processing and in the final product. Among these is the processing problem that a bottom of the preform cannot be made without an additional step involving closing the open end of either the downstream or upstream part of the extruded

(or co-extruded) pipe. As regards the product, again the orientation of the polymer chains is importantly different. Thus, both Nakagawa and Yamada suffer from much the same problems as Valyi, previously applied and then dropped.

If the person of ordinary skill in the art were to even attempt to combine Nakagawa and Yamada, the motive or incentive would be to form a parison rather than a preform, because Nakagawa only teaches forming a parison and Yamada also teaches the formation of a parison. To attempt to form a preform would be contrary to Nakagawa, and applicants do not see how Nakagawa and Yamada could be combined in such a way as to create a preform rather than a parison. In this regard, it is believed that the examiner basically agrees, as Yamada seems to have been relied upon **solely** for the materials disclosed therein and not for the purpose of providing any teachings to modify any other teachings of Nakagawa.

To partly summarize, neither Nakagawa nor Yamada disclose a multi-layer preform shaped by compression molding to provide a closed bottom and a particular molecular orientation, or the multi-layer container which uses this multi-layer preform with the difference of the peak width at half height on the surface of the inside and outside of the bottom. As neither reference teaches a fundamental feature

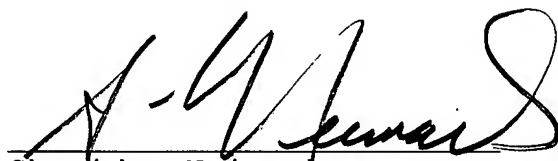
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of the present invention, it follows that no possible combination of the two, even if such combination were obvious, could result in the claimed subject matter. In other words, even if the combination as proposed were obvious, it would not reach applicants' claimed invention.

Applicants respectfully request favorable reconsideration and allowance.

Respectfully submitted,  
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